

REMARKS

Claims 1-48 are currently pending in the subject application and are presently under consideration of which claims 18-48 have been withdrawn. Claims 1-13 and 15-17 have been amended as shown on pp. 2-13 of the Reply. Further, claims 49-51 have been newly added.

Examiner Kennedy is thanked for the courtesies extended during the telephonic interview conducted on September 9, 2010, with Asmita Chande (L0558). While the discussion generally related to all the claims, the focus of the discussion was on independent claim 1 and proposed amendments. In particular, amendments disclosed herein were discussed and the Examiner indicated that the amendments appear to overcome the currently cited art. Further, the Examiner indicated that a new search would be needed in view of the amendments and thus, a formal agreement to allow the claims was not reached. In addition, the restriction requirement was discussed and the Examiner agreed to combine claims 33, 34, and 37 (Groups V and VIII) into a single group; and claims 35 and 38 (Groups VI and IX) into another group. Favorable reconsideration of the subject patent application is respectfully requested in view of the comments and amendments herein.

I. Restriction Requirement

The Restriction Requirement dated February 16, 2010, divides the previously presented 48 claims of the subject application into eleven groups. In particular, Group V – Claims 33-34 are drawn to determining formatting requirements, formatting data, delivering the formatted data, (classified in class 706, subclass 60); and Group VIII – Claim 37 is drawn to determining properties, limitations, or software plug-ins of the devices, means for delivering the formatted data, (classified in class 706, subclass 60). It is respectfully submitted that “a different search query” would not be required for these two groups and thus it is requested that the groups be combined into one group.

Similarly, Group VI – Claim 35 is drawn to receiving data from a physical device to a human machine interface, comparing format of the data to known formats, rendering data, (classified in class 706, subclass 60); and Group IX – Claim 38 is drawn to ascertaining formatting requirements, properties, limitations or software plug-ins, determining whether a format of data is known, determining the format of unknown data received by a Human Machine Interface, rendering the data in the HMI, mapping data path information to data delivered to the

physical device, (classified in class 706, subclass 60). It is respectfully submitted that “a different search query” would not be required for these two groups and thus it is requested that the groups be combined into one group.

During the Examiner interview, conducted on September 9, 2010, the above requests were discussed and the Examiner agreed to combine claims 33, 34, and 37 (Groups V and VIII) into one group, and claims 35 and 38 (Groups VI and IX) into another group, thus, diving the previously presented 48 claims of the subject application into nine groups.

II. Rejection of Claims 1-17 Under 35 U.S.C. §103(a)

Claims 1-17 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Wolff *et al.* (US2003/0120714). Withdrawal of the rejection is respectfully requested for at least the following reasons. Wolff *et al.* fails to teach or suggest all the features of claims 1-17.

[T]he prior art reference (or references when combined) must teach or suggest all the claim limitations. See MPEP § 706.02(j). See also KSR Int'l Co. v. Teleflex, Inc., 550 U. S. 398, 04-1350, slip op. at 14 (2007). The teaching or suggestion to make the claimed combination and the reasonable expectation of success must be found in the prior art and not based on applicant's disclosure. See *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991) (emphasis added).

One or more embodiments of the subject application relate to communication and display of data in a graphical format that can facilitate the control and graphical representation of equipment obtained from a plurality of devices in an industrial automation environment. In particular, software objects within a HMI that represent physical devices can be manipulated, thereby effectuating a desirable response from the physical devices. Software objects representing physical devices can be rendered in sufficient detail to display various intricacies associated with the physical devices. For example, a physical device can include a variety of mechanisms to manipulate operation, including push buttons, sliders, dials, gauges, etc. A software object representing the physical device can likewise include graphical representations of such mechanisms, wherein manipulation of the mechanisms in software can effectuate manipulation of the physical mechanisms. (See e.g., page 4, lines 7-15.) In this regard, independent claim 1, as amended, recites *a processing component that renders one or more*

multi-dimensional software objects, that represent at least one process point associated with the physical device, based at least in part on the at least one of a property, limitation, or software plug-in of the plurality of devices, wherein manipulation of the one or more multi-dimensional software objects effectuates a change of state in the physical device. Wolff *et al.* fails to disclose this novel aspect, as explained below.

Wolff *et al.* relates to machine vision systems, and more particularly, to human machine interfaces (HMIs) for training, controlling, and monitoring machine vision system (MVS) sensors and methods for installing and configuring such interfaces. The MVS employs a lens with variable zoom and focus/aperture setting, and an electro-optical pickup (CCD) for generating an image signal of an object. Moreover, the HMIs, of Wolff *et al.*, display the viewed object's image at a rate and a resolution sufficient to discern features of interest, and generally allow for setup (focus, contrast), training and monitoring by the user on a display device (e.g., PDA). (See page 3, [0030], and [0033].) Thus, it is clear that the image rendered on the display is that of an object viewed by a sensor. Nowhere does Wolff *et al.* teach or suggest a *component that renders one or more multi-dimensional software objects, that represent at least one process point associated with the physical device*. Additionally, Wolff *et al.* is silent with respect to *manipulation of the one or more multi-dimensional software objects effectuates a change of state in the physical device*, as recited in independent claim 1. Instead, Wolff, *et al.* simply relates to utilizing an image compression technique to enhance the detail of an image to an appropriate gray or contrast level. Specifically, the PDA of Wolff *et al.* contains software processes within its resident MVS application that display the current and maximum range of intensity (for aperture adjustment) and the current and maximum degree of focus. Based upon the returned data displayed to the user, optical focus and optical aperture can be adjusted until the desired readings are displayed to the user. However, Wolff does not teach or suggest adjusting optical focus and/or optical aperture by manipulation of a rendered image, and thus fails to disclose all aspects of independent claim 1.

With respect to dependent claims, dependent claim 2 recites *the processing component facilitates modifying a data value of the at least one process point by changing data values associated with the one or more multi-dimensional software objects.* As noted above, Wolff *et al.* is silent with respect to manipulation of the rendered image. In addition, Wolff *et al.* fails to disclose modifying a data value of the at least one process point by changing data values

associated with the one or more multi-dimensional software objects, and thus does not teach or suggest all aspects of dependent claim 2. Further, nowhere does Wolff *et al.* disclose a component that *receives an input for selection of the at least one process point from a nested data structure* and hence is silent with respect to features of dependent claim 3. Furthermore, Wolff *et al.* simply relates to receiving an image of an object from a MVS but fails to receive process data from physical device within the industrial automation environment. Moreover, Wolff *et al.* does not teach or suggest a *physical device includes at least one of a valve, a pump, a relay, or a press*, as recited in dependent claim 7.

In light of at least the foregoing, it is apparent that Wolff *et al.* does not disclose all aspects of independent claim 1 (and associated dependent claims). Hence, it is respectfully requested that the rejection of these claims be withdrawn.

III. Newly added claims 49-51

Newly added claim 49 depends from independent claim 1 and thus is patentably distinct over the art of record for at least the same reasons as is independent claim 1. Further, independent claims 50-51 emphasize novel aspects of the subject specification discussed *supra* in connection with claim 1 and therefore are patentably distinct over the art of record for at least the same reasons as discussed *supra* with respect to independent claim 1

CONCLUSION

The present application is believed to be in condition for allowance in view of the above comments and amendments. A prompt action to such end is earnestly solicited.

In the event any fees are due in connection with this document, the Commissioner is authorized to charge those fees to Deposit Account No. 50-1063 [ALBRP314US].

Should the Examiner believe a telephone interview would be helpful to expedite favorable prosecution, the Examiner is invited to contact Applicants' undersigned representative at the telephone number below.

Respectfully submitted,
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